PART G
MISCELLANEOUS

WAC 296-52-710 Exemptions. These rules do not apply to in process storage and intraplant transportation during the manufacture of small arms ammunition, small arms primers, and smokeless powder.

AMMUNITION

WAC 296-52-71015 Quantity limits. Quantity limitations are not imposed on the storage of small arms ammunition in warehouses, retail stores, and other general occupancy facilities, except those imposed by the limitations of the storage facility.

WAC 296-52-71020 Storage with Division 1.1, 1.2, or 1.3 explosives. Small arms ammunition can't be stored with Division 1.1, 1.2, or 1.3 explosives.

WAC 296-52-71025 Separation from flammable materials. Small arms ammunition must be separated from flammable liquids, flammable solids (as classified in 49 CFR Part 172), and oxidizing materials by a:

- Fire resistant wall with a one-hour rating
  OR
- Distance of twenty five feet

SMALL ARMS SMOKELESS POWDER

WAC 296-52-71035 Transportation. Quantities of small arms ammunition weighing more than fifty pounds must be transported according to federal Department of Transportation (U.S. DOT) regulations.

WAC 296-52-71040 Shipping container.

- Small arms smokeless powder (Division 1.2 or 1.3) must be packed, stored, and transported in U.S. DOT approved shipping containers.
- All smokeless powder must be stored in shipping containers made for smokeless powder (as required by 49 CFR 173.93).

WAC 296-52-71045 Storage.

(1) **Private residence or car.**

- Twenty-five pounds or less of small arms smokeless powder, no restrictions
- Twenty-five to fifty pounds of small arms smokeless powder, they must be stored in a strong box or cabinet constructed of a minimum of ¾-inch plywood or equivalent material, on all sides, top, and bottom

(2) **Commercial stocks.**

- Over twenty pounds but not more than one hundred pounds of small arms smokeless powder must be stored in portable wooden boxes with a minimum of one-inch thick walls
- Small arms smokeless powder not exceeding one hundred fifty pounds, must be stored in a nonportable storage cabinet with a minimum of one-inch thick wood walls

(3) **Dealer's warehouse.**

- A dealer's warehouse cannot hold more then one hundred fifty pounds of small arms smokeless powder
- Twenty to one hundred pounds of small arms smokeless powder must be stored in a minimum of one-inch thick portable or fixed wooden boxes

WAC 296-52-71045 (Cont.)

(4) **Dealer's display.**

- The dealer's display cannot exceed more then seventy-five pounds of small arms smokeless powder
- Small arms smokeless powder must be stored in one-pound containers

(5) **Magazines.** Small arms smokeless powder that exceed one hundred fifty pounds must be stored in approved licensed magazines. See Storage licensing, WAC 296-52-660, Storage of explosive materials, WAC 296-52-690, and Magazine construction, WAC 296-52-700.

SMALL ARMS AMMUNITION PRIMERS

WAC 296-52-71055 Shipping containers. Small arms ammunition primers must be packed, stored, and transported in U.S. DOT approved shipping containers.

WAC 296-52-71060 Separation from flammable materials. Primers must be separate from flammable liquids, flammable solids, and oxidizing materials by a:

- Fire resistant wall with a one hour rating
  OR
- Distance of twenty five feet.

WAC 296-52-71065 Storage.

(1) **Private residence.** The maximum small arms ammunition primers permitted is ten thousand primers. No restrictions apply.

(2) **Private car.** The maximum small arms ammunition primers permitted is twenty-five thousand primers. No restrictions apply.

(3) **Dealer's display.** The maximum small arms ammunition primers permitted is ten thousand primers. No restrictions apply.

(4) **Dealer's warehouse.**

- The maximum small arms ammunition primers permitted is seven hundred fifty thousand primers
  - No more than one hundred thousand small arms ammunition primers may be stored in one stack
  - Stacks must be separated by at least fifteen feet

(5) **Magazines.** If there are more than seven hundred fifty thousand small arms ammunition primers, they must be stored in approved licensed magazines (see Storage licensing, WAC 296-52-660, Storage of explosive material, WAC 296-52-690, and Magazine construction, WAC 296-52-700).

BLACK POWDER

WAC 296-52-71075 Shipping containers. Black powder, used in muzzleloading firearms must be packed, stored, and transported in U.S. DOT approved shipping containers.

WAC 296-52-71080 Storage.

(1) **Private residence.** No more than 5 pounds of black powder is permitted. No restrictions apply.

(2) **Private car.** No more than 5 pounds of black powder is permitted. No restrictions apply.

(3) **Dealer's warehouse.** No more than 25 pounds of black powder is permitted. Black powder must be stored in an appropriate container or cabinet, which is securely locked.

(4) **Magazine.** Quantities of black powder, as used in muzzleloading firearms, in excess of twenty-five pounds must be stored in licensed magazines (see Storage licensing, WAC 296-52-660, Storage of explosive materials, WAC 296-52-690, and Magazine construction, WAC 296-52-700).

EXPLOSIVES AT PIERS, RAILWAY STATIONS, RAILWAY CARS, AND VESSELS NOT OTHERWISE SPECIFIED IN THIS CHAPTER

WAC 296-52-71090 Delivery to carriers. Explosives delivered to any carrier must comply with U.S. DOT regulations. Explosives cannot be delivered to any carrier unless the packaging is are in compliance with U.S. DOT regulations.

WAC 296-52-71095 Hours of transfer. Explosives cannot be received between sunset and sunrise from any:

- Railway station
- Truck terminal
- Pier
- Wharf
- Harbor facility
  OR
- Airport terminal.

WAC 296-52-71100 Storage in route. Explosives waiting for delivery or further transit at a railway facility, truck terminal, pier, wharf, harbor facility, or airport terminal must be:

- Stored in a safe place
- Isolated as much as practical
- In a manner that allows quick and easy removal.

WAC 296-52-71105 Railway cars.

(1) **Use of railway cars.**

Explosives cannot be kept in a railway car unless:

- An emergency exists
- Permission has been granted by the local authority
- The railway car, its contents, and methods of loading are in compliance with U.S. DOT regulations (49 CFR Chapter 1)

(2) **Warning signs for railway cars not in transit.**

- Any railway car containing explosives must have warning signs attached to every side of the car when it is:

WAC 296-52-71105 (Cont.)

- Stopped in transit
  OR
- At its designation
  AND
- No longer considered in interstate commerce

- Warning signs must read **"EXPLOSIVES--HANDLE CAREFULLY--KEEP FIRE AWAY."** The letters must be:

  - Red
  - At least one and one-half inches high
  - On a white background.

WAC 296-52-720 Appendix A, sample explosives-blasting ordinance for local jurisdictions, nonmandatory.

Explosives-blasting ordinance for local jurisdictions

Be it ordained by the _____ (jurisdiction name).

Section 1: Permit required.

(1) A current and valid blasting permit issued by _____ (jurisdiction name) is required by companies or individuals who:

- Possess explosive materials (as defined by chapter 296-52 WAC, Safety standards for possessions and handling of explosives)
- Conduct an operation or activity requiring the use of explosive materials
  OR
- Perform, order, or supervise the loading and firing of high explosive materials

(2) Anyone in _____ (jurisdiction name) who does not have a valid blasting permit cannot transport, sell, give, deliver, or transfer explosive materials.

(3) A blasting permit is required for every individual project requiring blasting explosives.

(4) A permit issued to any person, company, or corporation under this ordinance is nontransferable to any other person, company, or corporation.

(5) All blasting permits issued by _____ (jurisdiction name) must follow all federal, state, county, and city laws and regulations that apply to these activities with explosive materials:

- Obtaining
- Owning
- Transporting
- Storing
- Handling
- Using.

WAC 296-52-720 (Cont.)

Section 2: Application contents.

(1) The proper administrative authority (__name__) or their designee, has the power and authority to issue blasting permits and requires persons, companies, or corporations who are issued permits to file an application that includes:

(a) A completed application form provided by _____ (jurisdiction name) specifying the name and address of the person, company or corporation applying for the permit, and the name and address of the blast site or the person who will actually supervise the blasting.

(b) A current and valid explosives license issued by the state of Washington department of labor and industries to one or more individuals working on the specific blasting project.

(c) A transportation plan according to Section 8.

(d) A blasting plan according to Section 10(1).

(e) A traffic control plan according to Section 10(2).

(f) A preblast; notification, inspection, and monitoring plan according to Section 10(3).

(g) Proof of insurance must be provided according to Section 4.

(2) _____ (jurisdiction name) will issue a permit within fourteen days of receiving an application that includes acceptable documentation of the above items 1 a through g through 7. If the permit is denied, it must be done within fourteen days of administering authority receipt and must include a list of reasons for denial as well as instructions for reapplication.

Section 3: Fee.

A permit fee is required for each permit issued. It should be:

- Valid for twelve months
- Follow the local fee schedule
- Renewable

Section 4: Liability insurance required.

(1) If the _____ (jurisdiction name) design requires approval, then coverage of one million dollars or more is required or other reasonable amount depending on the circumstances as determined by _____ (name of the proper administrative authority).

(2) The certificate must also state that the insurance company must give _____ (jurisdiction name) a minimum of ten days notice of cancellation of the liability insurance coverage.

(3) The _____ (name of the proper administrative authority) has the power and authority to limit the level of blasting. After examining all pertinent circumstances surrounding the proposed blasting, they may refuse to issue a permit, or suspend, or revoke an existing permit.

Section 5: Revocation.

The _____ (name of the proper administrative authority) has the power to revoke any permit if the permit holder does not follow the requirements of this chapter. The permit holder has twenty-four hours to remove all explosive materials after being notified that their permit has been revoked.

WAC 296-52-720 (Cont.)

Section 6: Denial or revocation appeal.

Any person, company, or corporation whose blasting permit application is denied, suspended, or revoked by _____ (name of proper authority), may file a notice of appeal within ten days to _____ (name of the legislative body with jurisdiction over the administrator).

- The legislative body must schedule an appeals hearing within fourteen days.

Section 7: _____ (jurisdiction name) not to assume liability.

_____ (jurisdiction name) is not responsible for any damage caused by the person, company, or corporation blasting with _____ (jurisdiction name).

Section 8: Transportation of explosives (transportation plan).

(1) You must include a transportation plan that addresses the transportation of explosive materials within _____ (jurisdiction name) with your application for a blasting permit.

(2) The transportation plan must include the following information:

(a) Route used for deliveries and returns

(b) Hours of transportation

(c) Maximum quantities of explosives being transported

(d) Types of vehicles being used. Vehicles must be in compliance with federal and state transportation regulations for transportation of explosive material.

Section 9: Storage of explosives.

(1) No overnight storage of explosive material is permitted within the limits of _____ (jurisdiction area) without specific amendments to the permit allowing storage. Blast holes loaded with explosives are to be shot on the day they are loaded.

(2) The required method of handling explosives in _____ (jurisdiction area) is as follows:

(a) Same day delivery

(b) Stand by during loading

(c) Return of all unused explosive materials.

Section 10: Use of explosives.

(1) **Blasting plan.** A blasting plan for each project must be submitted to _____ and approved by the _____ (name of the proper administrative authority) or their designee prior to issuing a blasting permit. The plan must include additional documentation for the proposed blasting operation. For example, maps, site plans, and excavation drawings. The plan must include:

(a) The location where the blast will occur

(b) The approximate total amount of material to be blasted

WAC 296-52-720 (Cont.)

(c) The incremental volumes, per blast, of material to be blasted

(d) The types and packaging of explosive materials to be used

(e) The drill hole diameters, depths, patterns, subdrilling depths and drill hole orientation to be used

(f) The initiation system, the incremental delay times, and the location of the primers in the explosive column

(g) The stemming depths and stemming material for the various estimated depths of drill holes to be blasted

(h) The approximate powder factors anticipated

(i) The flyrock control procedures and equipment to be used

(j) The maximum number of blasts that will be made in one day

(k) The blast warning sound system and equipment to be used

(l) The scheduled start date and finish date of blasting operations

(m) Additional requirements as needed.

(2) **Traffic control plan.** A traffic control plan acceptable to _____ (jurisdiction name) detailing signing, flagging, temporary road closures, and detour routes for blasting operations must be filed before the blasting permit is issued.

(3) **Preblast notification plan.** A plan outlining preblast public notifications, structural inspections, and blast effect monitoring within a specified distance of the blasting is required before the blasting permit is issued.

(a) **Separation distance.** The distances from the blasting where the notification, preblast structural inspection, and blast monitoring is required must be determined by the scaled distance formulas described below. Blasting will not be permitted until the notification and inspection requirements are completed.

(b) **Scaled distance formulas.**

(i) The distance from the blast within which:

- Notification of all occupied structures is required: Da .= 90 w
- Inspection of all occupied structures is required: Db .= 75 w
- Monitoring of selected structures is required: Dc = 60 w

(ii) In the above formulas:

- Da, Db, and Dc are the actual distances in feet from the closest point in the blast.
- W is the square root of the maximum weight of the explosives in pounds detonated with a minimum 8 millisecond from another detonation event.

WAC 296-52-720 (Cont.)

(c) **Notification letter.** The preblast notification must consist of a letter advising all residents within the distance (specified in WAC 296-52-720 section 10 (3)(b)) of the blasts. The letter must include the intent of the blasting program, its anticipated impact on local residents, the proposed duration of blasting activities, and provide telephone numbers for public contact. Distribution of this notification must be made a minimum of seven days before the start of blasting. The source of the chart is 121.8507, Bureau of Mines, U.S. Department of Interior, 1980.

(d) **Preblast inspection.** A preblast inspection of resident's property must be offered to all residents within the distance (specified in WAC 296-52-720 section 10 (3)(b) above) of the blasting at no cost to the resident and will be preformed by a qualified third party who is not an employee of the contractor. A copy of the individual inspection reports and a log of all photos taken are to be provided to _____ (jurisdiction name). Where inspections are not allowed by the resident or are not possible for other reasons, a certified letter must be sent to the occupant/owner at the unsurveyed address advising them of their right to a preblast inspection and the possible consequences of denying an inspection. The preblast inspection program for residences within the specified distance must be complete two days prior to the start of blasting and the _____ (name of the proper administrative authority) should be notified.

(4) **Blast-plan compliance inspections.** Blast-plan compliance inspections may be required for every blast until the operator can demonstrate an ability to safely blast according to the blast plan and control the extraneous effects of blasting such as flyrock, noise/air blast, and ground vibration. If more than two blasting inspections are required, an additional fee of _____ (insert dollar amount) per blast inspection will be assessed.

(5) **Monitoring.** All blasts which require monitoring by section 10 (3)(b) are to be monitored using blast monitoring equipment designed for the purpose and carrying a certificate of calibration dated within the previous twelve months. The blast monitors must record peak particle velocity and frequency in three orthogonal directions and air over pressure. Monitored shots in which the pounds detonated per an 8-millisecond time increment is less than ten pounds, one blast monitor is required. When ten or more pounds is detonated per an 8-millisecond time interval, two or more blast monitors are required. All blast-monitoring records are to be signed and submitted to _____ (jurisdiction name) within twenty-four hours of each blast.

(6) **Maximum peak particle velocity.** The maximum peak particle velocity in any seismic trace at the dominant frequency allowed on any residential, business or public structure designed for human occupancy is to be determined by the chart in WAC 296-52-67065(1).

(7) **Air blast.** The maximum air blast over pressure permitted at the closest residential, business or public structure designed for human occupancy is not to exceed 133 dBL @ 2.0 Hz hi pass system per WAC 296-52-67065(3). The source of this regulation is 121.8485, Bureau of Mines, U.S. Department of Interior, 1980.

(8) **Utilities.** Whenever blasting is being conducted in close proximity to existing utilities, the utility owner must be notified a minimum of twenty-four hours in advance of blasting.

(9) **Blast report.** A signed blast report, on a form approved by the _____ (name of the proper administrative authority) or their designee, needs to be filed with _____ (jurisdiction name) within twenty-four hours of the blast. The report must include the following blast information:

WAC 296-52-720 (Cont.)

(a) Date, time, and location of the blast

(b) Number of drill holes

(c) Maximum, minimum and average drill hole depth

(d) Drill hole diameter

(e) Subdrill depth

(f) Total pounds of each type of explosive used

(g) A drill hole section schematic showing the loading of a typical hole

(h) Amount and type of stemming material

(i) Schematic showing the drill hole pattern

(j) Initiated delayed sequence

(k) Maximum pounds of explosives detonated in any eight millisecond time interval

(l) Type and size of any flyrock protection devices used, if any

(m) Comment regarding the outcomes of the blast.

(10) _____ (jurisdiction name) must be notified immediately of any unplanned or unusual events that resulted from the blast. The permittee must also report any incident, damage claim, or neighbor annoyance report brought to the permittee's attention within twenty-four hours.

Section 11:

This ordinance will be in effect to preserve the health, peace, and safety of the citizens of _____ (jurisdiction name).

WAC 296-52-725 Appendix B, sample format for a blast record, nonmandatory.

Note: The sample blast record format is nonmandatory, but the information shown in the sample is required per WAC 296-52-67010(8), Blast records.

SAMPLE FORMAT FOR A BLAST RECORD

(*Minimum Record Requirements)*

Blast/Record Date_____ Blast #_____Time of Blast_____ ☐ AM ☐ PM

Employer:_____

Blast-Site Location:_____

Blast Crew Members:

_____

_____

_____

General Weather Conditions (Clouds & Ceiling, Humidity, Wind Speed/Direction, Temperature, etc.):

_____

_____

_____

Type & Condition of Rock Blasted:

_____

Number of Boreholes	Diameter _____ in.	Depth _____ ft.	Backfill_____
Borehole Water Depth	Burden _____ ft.	Spacing _____	
Number of Rows	Stemming _____ ft.	Stemming Material _____	

Non-Standard Pattern Details:

MAKE, TYPE and AMOUNT Of Explosives Used

DETONATORS

☐ Electric ☐ None

_____ _____lb.
_____ _____lb.
_____ _____lb.
_____ _____lb.
_____ _____lb.
_____ _____lb.

Manufacturer _____
Length _____
Delay Periods _____
# of Units _____

Total Pounds in Blast = _____lb.

☐ Cord _____

Maximum boreholes per delay _____ Maximum loaded pounds per delay _____

Number of decks per borehole _____ Weight of explosives per deck _____

Distance, direction, and address of closest structure from blast site _____ ft.

Distance: _____ ft. Direction: _____ Address: _____

Calculated scaled distance W = $(D/(55/60/65))^2$ = _____ Maximum lb. Per delay allowed in (USBM)

Distance, direction, and address of seismographs from the blasts site.

Distance: _____ ft. Direction: _____ Address: _____

Calibration dates of seismographs used:

Number _____ Date _____ Number _____ Date _____

Method used to measure distances (Laser RF, Optical RF, GPS, Tape, Wheel, Map)?

_____ Other Method: _____

WAC 296-52-725 (Cont.)

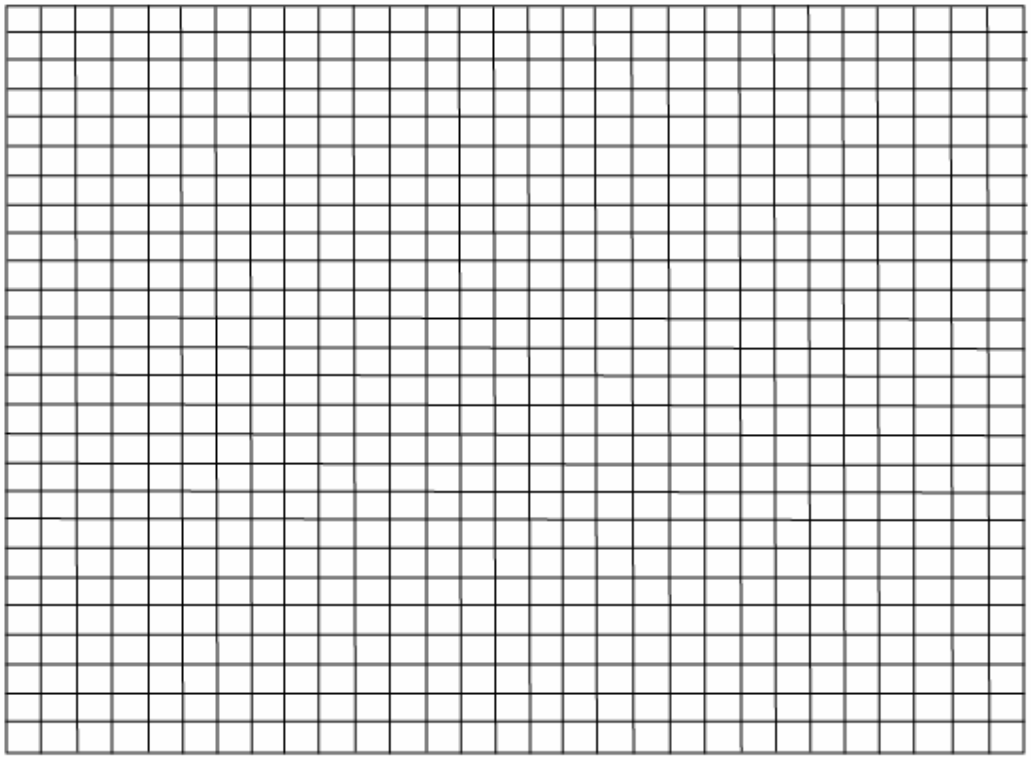
BLASTING RECORD

SKETCH OF BLAST LAYOUT

IDENTIFY SHOT LOCATION BY STATION OR BY DIRECTION AND DISTANCE TO KNOWN STRUCTURE OR OBJECT. SHOW NORTH ARROW. SHOW DELAY NUMBER BY HOLE AND WIRING/CORD/TUBING HOOKUP.

TYPICAL HOLES

BLAST LOCATION & BLAST NUMBER_____ **DATE:**___/___/___



SHOW: Depth, Stemming, Decks, Water, Primer Locations, Subdrilling, etc.

BLAST COMMENTS including fragmentation, muckpile configuration, and flyrock (use additional paper if needed)

_____

_____

_____

_____

SIGNATURE (Blaster in charge): _____ Date: _____

License Number: _____ Expiration Date: _____